

07-28-06

PTO/SB/21 (04-04)

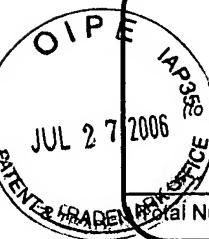
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TRANSMITTAL  
FORM

(To be used for all correspondence after initial filing)

PATENTS & TRADEMARKS  
U.S. DEPARTMENT OF COMMERCE

Total Number of Pages in This Submission

Application Number

10/776,856

Filing Date

2-11-2004

First Named Inventor

Nagaraj Jayanth et al.

Art Unit

3744

Examiner Name

H. Tanner

Attorney Docket Number

0315-000510/US/COD

## ENCLOSURES (check all that apply)

 Fee Transmittal Form Drawing(s) After Allowance Communication to Technology Center (TC) Fee Attached Licensing-related Papers Appeal Communication to Board of Appeals and Interferences Amendment / Reply Petition Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) After Final Petition to Convert to a Provisional Application Proprietary Information Affidavits/declaration(s) Power of Attorney, Revocation Change of Correspondence Address Status Letter Extension of Time Request Terminal Disclaimer Other Enclosure(s)  
(please identify below): Express Abandonment Request Request for Refund

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 Information Disclosure Statement CD, Number of CD(s) \_\_\_\_\_ Certified Copy of Priority Document(s)

## Remarks

The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750.

 Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm  
or  
Individual name

Harness, Dickey &amp; Pierce, P.L.C.

Attorney Name  
Michael MalinzakReg. No.  
43,770

Signature

Date

7-27-2006

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

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Signature		Date	7-27-2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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O P R E  
APR 35  
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# FEE TRANSMITTAL for FY 2006

Effective 2/8/2006. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 500)

## Complete if Known

Application Number	10/776,856
Filing Date	2-11-2004
First Named Inventor	Nagaraj Jayanth et al.
Examiner Name	H. Tanner
Art Unit	3744
Attorney Docket No.	0315-00051/US/COD

## METHOD OF PAYMENT (check all that apply)

 Check  Credit card  Money  Other  None  
Order
 Deposit Account:Deposit Account Number  
08-0750Deposit Account Name  
Harness, Dickey & Pierce, PLC

## The Director is authorized to: (check all that apply)

 Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) during the pendency of this application  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500
1403	1000	2403	500	Request for oral hearing	
1452	500	2452	250	Petition to revive - unavoidable	
1453	1500	2453	750	Petition to revive - unintentional	
1462	400	1462	400	Petition fee under 37 CFR 1.17(f)	
1463	200	1463	200	Petition fee under 37 CFR 1.17(g)	
1464	130	1464	130	Petition fee under 37 CFR 1.17(h)	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
Total Claims	-20 **	= 0	X 0	Fee from below	Fee Paid
Independent Claims	-3 **	= 0	X 0	= 0	
Multiple Dependent				= 0	

SUBTOTAL (1) (\$ 0)

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims	Fee from below	Fee Paid
Total Claims		-20 **	= 0	X 0 = 0
Independent Claims		-3 **	= 0	X 0 = 0
Multiple Dependent				= 0

## Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	50	2202	25	Claims in excess of 20
1201	200	2201	100	Independent claims in excess of 3
1203	360	2203	180	Multiple dependent claim, if not paid
1204	200	2204	100	** Reissue independent claims over original patent
1205	50	2205	25	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0)

## 4. SEARCH/EXAMINATION FEES

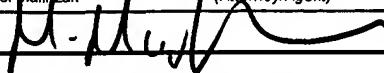
1111	500	2111	250	Utility Search Fee
1112	100	2112	50	Design Search Fee
1113	300	2113	150	Plant Search Fee
1114	500	2114	250	Reissue Search Fee
1311	200	2311	100	Utility Examination Fee
1312	130	2312	65	Design Examination Fee
1313	160	2313	80	Plant Examination Fee
1314	600	2314	300	Reissue Examination Fee

SUBTOTAL (4) (\$ 0)

\*\*or number previously paid, if greater; For Reissues, see above

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Michael Malinak	Registration No. (Attorney/Agent)	43,770	Telephone	(248) 641-1600
Signature			Date	7-27-2006	

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Nagaraj Jayanth et al.

Application No.: 10/776,856

Filed: February 11, 2004

For: Compressor Diagnostic System



Art Unit: 3744

Examiner: H. Tanner

**APPEAL BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This brief is filed in accordance with 37 C.F.R. § 41.37 and within one month of the mailing of the Notice of Panel Decision from Pre-Appeal Brief Review mailed June 27, 2006, and is in furtherance of the Notice of Appeal filed March 20, 2006.

The fees required under 37 C.F.R. § 41.20(b)(2) are dealt with in the accompanying Transmittal of Appeal Brief.

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01-54492

MAM/RWM/MHS

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

- I. Real Party in Interest
- II. Related Appeals and Interferences
- III. Status of Claims
- IV. Status of Amendments
- V. Summary of Claimed Subject Matter
- VI. Grounds of Rejection to be Reviewed on Appeal
- VII. Argument
- Appendix A Claims Appendix
- Appendix B Evidence Appendix
- Appendix C Related Proceedings Appendix
- Appendix D Notice of Panel Decision from Pre-Appeal Brief Review mailed June 27, 2006

**I. REAL PARTY IN INTEREST**

The real party in interest for this appeal is:

Copeland Corporation

**II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS**

Appellants filed a Request for a Pre-Appeal Brief Review on March 20, 2006. A copy of the Notice of Panel Decision from Pre-Appeal Brief Review mailed June 27, 2006 is attached hereto as Appendix B. There are no appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

**III. STATUS OF CLAIMS**

**A. Total Number of Claims in Application**

There are 15 claims pending in this application.

**B. Current Status of Claims**

1. Claims canceled: 0

2. Claims withdrawn from consideration but not canceled: 0

3. Claims pending: 1-15

4. Claims allowed: 0

5. Claims rejected: 1-15

**C. Claims on Appeal**

The claims on appeal are claims 1-15

**IV. STATUS OF AMENDMENTS**

Appellants filed a Response after Final Rejection on February 8, 2005 without amendments to the pending claims. Accordingly, all amendments have been entered in the application.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

Independent Claim 1 recites a diagnostic system (item 100, Paragraphs [0034] and [0035], and Figures 2 and 3) for a compressor assembly including a compressor (item 10, Paragraphs [0026]-[0032], and Figure 1) and a motor protector (item 54, Paragraph [0035] and Figure 1). The diagnostic system (100) includes logic circuitry (item 104, Paragraphs

[0034] and [0035], and Figures 2 and 3) associated with the motor protector (54) that analyzes the status of the motor protector (54) as a function of time to identify a specific fault cause. See Paragraphs [0005], [0035], [0047]-[0049], and [0057]-[0060], and Figures 4, 5, and 11.

Independent Claim 10 recites a method of diagnosing a compressor assembly including a compressor (item 10, Paragraphs [0026]-[0032], and Figure 1) and a motor protector (item 54, Paragraph [0035] and Figure 1). The method includes analyzing a status of the motor protector (54) as a function of time and identifying a compressor fault cause based on the analysis. See Paragraphs [0005], [0035], [0047]-[0049], and [0057]-[0060] and Figures 4, 5, and 11.

In each of the foregoing claims, the motor protector (54) may include a thermal protector (item 54, Paragraph [0029], and Figure 1) disposed in close proximity to motor windings (item 46, Paragraph [0029], and Figure 1) of the compressor (10). The thermal protector (54) de-energizes the compressor (10) if the thermal protector (54) exceeds its normal temperature range. See Paragraph [0029] and Figure 1.

Monitoring the motor protector (54) as a function of time may include monitoring how frequently the motor protector (54) is tripped (i.e., when the thermal limit of the motor protector (54) is exceeded, for example). See Paragraphs [0005], [0047]-[0049], and [0057]-[0060] and Figures 4, 5, and 11. Once the condition causing the motor protector (54) to trip (e.g., once the temperature proximate to the motor protector (54) falls below the thermal limit in the foregoing example), the motor protector (54) is automatically reset to permit operation of the compressor (10) once again. See Paragraph [0005]. Because

some categories of faults repeatedly trip the motor protector (54) and other categories of faults trip the motor protector (54) less frequently, the diagnostic system (100) can differentiate between various faults by monitoring the motor protector (54) as a function of time. See Paragraphs [0005], [0047]-[0049], and [0057]-[0060] and Figures 4, 5, and 11.

For example, the diagnostic system (100) may declare a seized bearing condition if the motor protector (54) is tripped within about twenty seconds or less of compressor ON time. See Paragraph [0005]. Conversely, the diagnostic system (100) may declare a low refrigerant charge condition if the motor protector (54) is tripped after more than ninety minutes of compressor ON time. See Paragraph [0005]. The specification lists numerous other faults that may be detected by the diagnostic system (100) by monitoring the motor protector (54) as a function of time at Paragraphs [0047]-[0049], and [0057]-[0060] and Figures 4, 5, and 11.

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether the combination of Sharood et al. (U.S. Pat. No. 6,453,687) in view of Wiggs (U.S. Pat. No. 4,463,571) establishes a *prima facie* case of obviousness under 35 U.S.C. § 103(a), with respect to Claims 1-15.

## VII. ARGUMENT

### A. THE COMBINATION OF SHAROOD ET AL. (U.S. PAT. NO. 6,453,687) IN VIEW OF WIGGS (U.S. PAT. NO. 4,463,571) FAILS TO RENDER OBVIOUS THE TEACHINGS OF CLAIMS 1-15.

#### No Prima Facie Case of Obviousness

Appellants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness because:

- I. there is no suggestion or motivation to combine Sharood et al. and Wiggs;
- II. there is no reasonable expectation of success in combining Sharood et al. with Wiggs as the modification of Sharood et al. by Wiggs would render the Sharood et al. device inoperable for its intended purpose; and
- III. assuming, arguendo, that Sharood et al. and Wiggs may be combined, the combination fails to teach or suggest the presently pending claims.

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." See MPEP § 2143. "The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not in applicant's disclosure." See MPEP § 2143 citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

**I. LACK OF SUGGESTION OR MOTIVATION TO COMBINE REFERENCES**

Appellants respectfully submit that there is no teaching, suggestion, or motivation to modify the retrofit plug of Sharood et al. to include the diagnostic monitoring system of Wiggs and that such a combination would render the device of Sharood et al. inoperable for its intended purpose.

**SHAROOD ET AL.**

Sharood et al. fail to teach or suggest monitoring a motor protector of a compressor. In the Office Action mailed October 19, 2005, at page 2, the Examiner cites Col. 27, ln. 42 to Col. 28, ln. 64 as the relevant portion of Sharood et al., which teaches a retrofit plug (2650) that monitors a run time of a compressor of a refrigeration appliance (2600) to determine if a refrigerator door of the refrigeration appliance (2600) has been left open. See Sharood et al. at Col. 27, Ins. 59-65. Specifically, Sharood et al. disclose that if a compressor associated with the refrigeration appliance (2600) "is on longer than expected" and a temperature within a refrigerated compartment of the refrigeration appliance (2600) rises, a door-open condition may be detected. See Sharood et al. at Col. 27, Ins. 59-65.

Sharood et al. also disclose several other features, none of which are associated with whether the compressor motor protector has tripped. For example, the retrofit plug (2650) may be used to alert a user of a power failure, dial a repair service to repair the refrigerated appliance (2600), monitor a temperature of the refrigerated compartment, provide an estimation of how long until food spoilage occurs (i.e., for food disposed within

the refrigerated compartment), and provide diagnostic information to aid in repair of the refrigerated appliance (2600). See Sharood et al. at Col. 27, ln. 42 to Col. 28, ln. 64.

But Sharood et al. do not teach or suggest monitoring a motor protector or any similar device, and further do not teach or suggest monitoring such a component as a function of time. While Sharood et al. describe alerting a remote location of a potential problem with the refrigeration appliance (2600) such as a power failure or a rising temperature within the refrigerated space, Sharood et al. do not describe actively protecting the compressor or refrigeration appliance (2600) by restricting power to a compressor—using a motor protector, for example—to prevent operation of the compressor and refrigeration appliance (2600) during unfavorable conditions. Accordingly, Sharood et al. fail to teach or suggest a motor protector *per se*, and therefore cannot teach or suggest monitoring a motor protector as a function of time.

#### WIGGS

Wiggs teaches an electrical monitoring system that monitors a high-pressure switch (22) and a low-temperature switch (36) to distinguish between a high-pressure condition and a low-temperature condition when servicing a compressor (10) associated with a heat pump system. See Wiggs at Col. 3, Ins. 19-35, Ins. 41-52, and Col. 4, Ins. 4-12. The high-pressure switch (22) and low-temperature switch (36) respectively provide a signal to the electrical monitoring system when either a high-pressure condition or a high-temperature condition is detected, thereby causing the electrical monitoring system to activate a lock-out relay (54, 64, respectively) and terminate current to a compressor motor. See Wiggs at Col. 1, Ins. 64-68, Col. 2, Ins. 1-31, and Col. 4, Ins. 3-25 and 58-64. The source of the

signal (i.e., the high-pressure switch (22) and low-temperature switch (36)) is identified by which relay (54, 64) is activated, thereby identifying the particular fault to a serviceperson. See Wiggs at Col. 1, Ins. 64-68, Col. 2, Ins. 1-31, and Col. 4, Ins. 3-25 and 58-64.

Wiggs does not disclose monitoring the status of the high-pressure switch (22) or the low-temperature switch (36) as a function of time, but rather, discloses that the high-pressure switch (22) and the low-temperature switch (36) are “continuously monitored.” See Wiggs at Col. 1, Ins. 63-67, and Col. 2, Ins. 1-2. More particularly, Wiggs does not disclose monitoring the frequency with which the high-pressure switch (22) or the low-temperature switch (36) are tripped, but only describes identifying the switch (22, 36) and monitoring whether the identified switch (22, 36) indicates a condition outside of a desired range (i.e., a pressure higher than a predetermined value and a temperature lower than a predetermined value). See Wiggs at Col. 2, Ins. 2-31. Neither switch (22, 36) is monitored as a function of time.

**SHAROOD ET AL. AND WIGGS: NO MOTIVATION TO COMBINE**

Sharood et al. disclose that the retrofit plug (2650) may be used to detect a door open condition of a refrigeration appliance (2600). But providing the retrofit plug (2650) with the ability to monitor high and low pressure switches of a compressor would not enhance the ability of Sharood’s retrofit plug (2650) to detect the door open condition because the retrofit plug (2650) bases its determination of a door-open condition on a run time of a compressor. Because Sharood et al. fail to teach or suggest monitoring switches associated with a compressor, and only suggest monitoring a compressor run time to detect a door-open condition of a refrigeration appliance (2600), Appellants respectfully

submit there is no suggestion or motivation to provide the retrofit plug (2650) of Sharood et al. with the ability to monitor switches associated with a compressor. Further, there is no basis to provide the retrofit plug (2650) of Sharood et al. with the ability to monitor the amount of time the switches are in a particular condition as neither reference provides such a feature. Therefore, Appellants respectfully submit that there is no suggestion or motivation to combine Sharood et al. and Wiggs.

**SHAROOD ET AL. AND WIGGS: INOPERABLE FOR ITS INTENDED PURPOSE**

Appellants submit that there is no suggestion or motivation to combine the teachings of Sharood et al. with Wiggs as such a combination would render the device of Sharood et al. inoperable for its intended purpose. As noted in MPEP § 2143.01(V), “[I]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” See MPEP § 2143.01(V) citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Sharood et al. disclose that if the compressor (10) is on longer than expected and a rising temperature in a refrigeration compartment (2610) of the refrigeration appliance (2600) is detected, the retrofit plug (2650) may detect a door-open condition. See Sharood et al. at Col. 27, Ins. 59-65. But modifying the retrofit plug (2650) of Sharood et al. with the teachings of Wiggs such that the retrofit plug (2650) of Sharood et al. is able to monitor a high-pressure switch and a low-temperature switch associated with a compressor would defeat the ability of the retrofit plug (2650) to determine how long the compressor (10) has been operating, an intended feature of Sharood’s retrofit plug (2650).

More specifically, the switches (22, 36) of Wiggs are either in an open position, preventing operation of the compressor (10), or in a closed position, permitting operation of the compressor (10). See Wiggs at Col. 3, Ins. 22-29 and Ins. 44-53. Only in the open position can we be certain whether the compressor is operating (it is not). In the closed position, the compressor will only operate if there is a demand for cooling. Thus, monitoring how long either switch (22, 36) is in the open position or the closed position cannot be used to determine a compressor run time, and therefore cannot predict whether a refrigerator door is open.

Monitoring the switches (22, 36) may indicate that operation of the compressor (10) is *permitted*, but not that the compressor (10) has been running for that same period of time. Thus, modification of Sharood et al. by Wiggs to monitor a length of time a switch associated with a compressor is open or closed does not indicate compressor run time and therefore renders the Sharood et al. device inoperable for its intended purpose of detecting a door-open condition. Accordingly, Appellants respectfully submit that there is no suggestion or motivation or any other technical basis to combine the teachings of Sharood et al. with Wiggs.

**II. No REASONABLE EXPECTATION OF SUCCESS**

As discussed immediately above, modifying the retrofit plug (2650) of Sharood et al. as suggested by the Examiner renders the device of Sharood et al. inoperable for its intended purpose. Therefore, Appellants respectfully submit that there is no reasonable expectation of success in providing the retrofit plug (2650) of Sharood et al. with the ability to monitor a switch such as the high-pressure switch (22) and the low-temperature switch (36) disclosed by Wiggs.

**III. COMBINATION FAILS TO TEACH OR SUGGEST THE CLAIM LIMITATIONS**

Assuming, arguendo, that Sharood and Wiggs may be combined, Appellants submit that the combination of Sharood et al. and Wiggs fails to teach or suggest *monitoring a motor protector as a function of time*. Sharood et al. teaches monitoring a compressor run time in combination with a temperature sensor to identify a door-open condition, but does not teach or suggest a motor protector, nor monitoring one. Wiggs discloses monitoring a high-pressure switch (22) and a low-temperature switch (36) to discriminate between a high-pressure condition and a low-temperature condition for use in diagnosing a compressor, but does not disclose monitoring either switch (22, 36) as a function of time. Therefore, the combination of Sharood et al. and Wiggs fails to teach or suggest *monitoring a motor protector as a function of time*.

For the foregoing reasons, Appellants respectfully submit that independent Claims 1 and 10, as well as Claims 2-9 and 11-15 respectively dependent therefrom, are in condition for allowance. Reconsideration and withdrawal of the rejections is respectfully requested.

Dated: July 27, 2006

Respectfully submitted,

By

  
Michael Malinzak  
Registration No.: 43,770  
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Attorneys for Appellants

**APPENDIX A****CLAIMS APPENDIX**

A copy of the claims involved in the present appeal is attached hereto. As indicated above, the following claims include the amendments filed by Appellants on July 25, 2005.

1. A diagnostic system for a compressor assembly including a compressor and a motor protector, said system comprising logic circuitry associated with the motor protector and operable to analyze a status of the motor protector as a function of time and identify a specific fault cause.
  
2. The diagnostic system of Claim 1, further comprising a demand signal sensor, wherein said logic circuitry is associated with said demand signal sensor.
  
3. The diagnostic system of Claim 2, further comprising a current sensor, wherein said logic circuitry is associated with said current sensor.
  
4. The diagnostic system according to Claim 2, wherein said demand signal sensor monitors a supply voltage.
  
5. The diagnostic system according to Claim 2, wherein said demand signal sensor is in communication with a system controller supplying a signal indicating demand.

6. The diagnostic system according to Claim 3, further comprising an indicator associated with said logic circuitry, said indicator receiving a signal from said logic circuitry to indicate a fault based on said current and demand signal.

7. The diagnostic system according to Claim 6, wherein said indicator is a plurality of lights indicating the presence or absence of a fault condition.

8. The diagnostic system according to Claim 1, wherein said logic circuitry is operable to output a coded sequence of electrical pulses to identify said specific fault cause.

9. The diagnostic system according to Claim 1, wherein said logic circuitry is operable to analyze said operating condition and identify a specific fault cause while the compressor is operating.

10. A method for diagnosing a compressor assembly including a compressor and a motor protector, said method comprising:

analyzing a status of the motor protector as a function of time; and  
identifying a compressor fault cause based on said analyzing.

11. The method according to Claim 10, further comprising:

sensing a demand signal;

sensing a current; and

analyzing said sensed demand signal and said current.

12. The method according to Claim 11, wherein said identifying a compressor fault cause includes indicating a specific fault cause based on said sensed current and demand signal.

13. The method according to Claim 10, wherein said identifying includes outputting a coded sequence of electrical pulses to identify a specific fault cause.

14. The method according to Claim 10, wherein said identifying occurs while the compressor is operating.

15. The diagnostic system according to Claim 1, further comprising an indicator associated with said logic circuitry, said indicator receiving a signal from said logic circuitry to indicate a fault.

**APPENDIX B**

**EVIDENCE APPENDIX**

No evidence pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the Examiner is being submitted.

**APPENDIX C**

**EVIDENCE APPENDIX**

As noted above in Section II., a copy of the Notice of Panel Decision from Pre-Appeal Brief Review mailed June 27, 2006 is attached hereto in Appendix D. There are no other related proceedings.

**APPENDIX D**

0315-000510/COD

<b>Application Number</b> 	<b>Application/Control No.</b> 10/776,856	<b>Applicant(s)/Patent under Reexamination</b> JAYANTH ET AL.	<i>MPK MMA MJS</i>
	Harry Tanner	Art Unit 3744	
<b>Document Code - AP.PRE.DEC</b>			

**Notice of Panel Decision from Pre-Appeal Brief Review***Appeal Brief**Due: 7-27-06*This is in response to the Pre-Appeal Brief Request for Review filed 3/20/06.

1.  **Improper Request** – The Request is improper and a conference will not be held for the following reason(s):

- The Notice of Appeal has not been filed concurrent with the Pre-Appeal Brief Request.
- The request does not include reasons why a review is appropriate.
- A proposed amendment is included with the Pre-Appeal Brief request.
- Other: \_\_\_\_\_

The time period for filing a response continues to run from the receipt date of the Notice of Appeal or from the mail date of the last Office communication, if no Notice of Appeal has been received.

2.  **Proceed to Board of Patent Appeals and Interferences** – A Pre-Appeal Brief conference has been held. The application remains under appeal because there is at least one actual issue for appeal. Applicant is required to submit an appeal brief in accordance with 37 CFR 41.37. The time period for filing an appeal brief will be reset to be one month from mailing this decision, or the balance of the two-month time period running from the receipt of the notice of appeal, whichever is greater. Further, the time period for filing of the appeal brief is extendible under 37 CFR 1.136 based upon the mail date of this decision or the receipt date of the notice of appeal, as applicable.

The panel has determined the status of the claim(s) is as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 1-14.  
 Claim(s) withdrawn from consideration: \_\_\_\_\_.

3.  **Allowable application** – A conference has been held. The rejection is withdrawn and a Notice of Allowance will be mailed. Prosecution on the merits remains closed. No further action is required by applicant at this time.

4.  **Reopen Prosecution** – A conference has been held. The rejection is withdrawn and a new Office action will be mailed. No further action is required by applicant at this time.

All participants:

(1) Thomas E. Denion  
 (2) Cheryl Tyler 

  
 (3) Harry Tanner  
 (4) \_\_\_\_\_



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Please find below and/or attached an Office communication concerning this application or proceeding.